

In the Claims:

Kindly amend the claims to read as follows:

1. (Canceled)
2. (Currently amended)      The method of claim 135, further comprising:  
  
superimposing the image of the ~~mesh~~ grid on an outline of the skin surface.
3. (Currently amended)      The method of claim 135, wherein ~~the mesh comprises a rectangular grid and~~ intersections of lines of the grid when undeformed correspond to locations of said sensors in said array.
4. (Original)                  The method of claim 3, wherein points on outside edges of the grid comprise anchor points which create a fixed reference that frames the image.
5. (Original)                  The method of claim 4, wherein the anchor points are represented with zero force.
6. (Original)                  The method of claim 3, wherein the intersections of the lines of the grid in the image are displaced in proportion to the force measured at said sensors.
7. (Canceled)
8. (Currently amended)      The method of claim 135, wherein the skin surface comprises a plantar surface of a foot.
9. (Currently amended)      The method of claim ~~135~~ 135, further comprising:

superimposing on the image of the ~~meshgrid~~, a field of scaled arrows, wherein an arrow points in a direction of a force vector and a relative magnitude of an arrow is proportional to a sensed force magnitude.

10. (Canceled)

11. (Currently amended) The method of claim ~~10~~35, wherein ~~the second force comprises force or pressure acting generally normal to said surface, and~~ said color mapping comprises color mapping of at least one of the ~~mesh-grid~~ and a plane parallel to said ~~meshgrid~~.

12. (Original) The method of claim 11, wherein said color mapping comprises linear color mapping.

13. (Currently amended) The method of claim ~~13~~35, further comprising:

automatically determining a location of maximum value of at least one of: said ~~measured-sensed distributed horizontal shear~~ force, skin bunching, skin stretching and skin twisting; and  
highlighting said location in said image.

14. (Canceled)

15. (Canceled)

16. (Currently amended) The method of claim ~~10~~35, wherein said distributed horizontal shear force and said ~~second force distributed vertical pressure~~ are ~~measured-sensed~~ with the same array of sensors.

17. - 34. (Canceled)

35. (New) A method for simultaneously visualizing distributed horizontal shear force and distributed vertical pressure acting on a skin surface, the distributed shear force and pressure being sensed at distributed points along the skin surface by an array of sensors, comprising:

displaying an image of a flat rectangular grid representing a plane where the skin surface meets the array of sensors;

deforming line intersections of the grid in the image only sideways in a plane of the grid in accordance with the distributed shear force sensed by the array of sensors; and

using color mapping to display, along with said image, distributed vertical pressure sensed by the array of sensors, whereby the distributed horizontal shear force and the distributed vertical pressure acting on the skin surface at the distributed points are displayed concurrently and differentially.

36. (New) The method of claim 11, wherein said color mapping comprises color mapping a flat plane behind the grid to display color, at locations corresponding to undeformed line intersections of the grid, representative of vertical pressure at said locations.

37. (New) The method of claim 13, wherein said automatically determining comprises computing an index for at least one of skin bunching, skin stretching and skin twisting, and identifying a location in said image where said index is a maximum.

38. (New) The method of claim 13, wherein said highlighting comprises displaying a marker at said location in the image.

39. (New) The method of claim 38, wherein the marker is displayed at a location of maximum value for a single instant in time.

40. (New) The method of claim 38, wherein the marker is displayed at a location of maximum value over a period of time.

41. (New) The method of claim 13, wherein said automatically determining comprises computing indices for skin bunching, skin stretching and skin twisting, and identifying

locations in said image where said indices are at a maximum at a single instant in time and/or over a period of time.